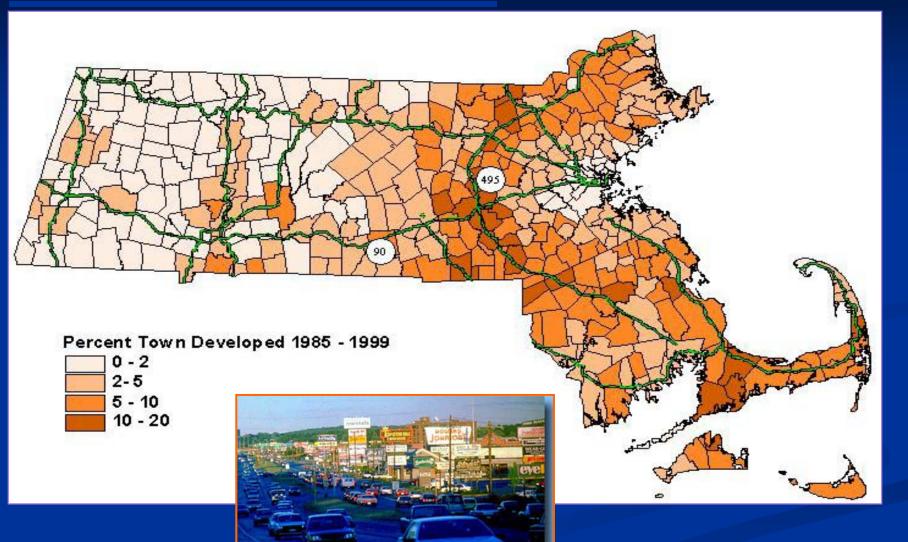
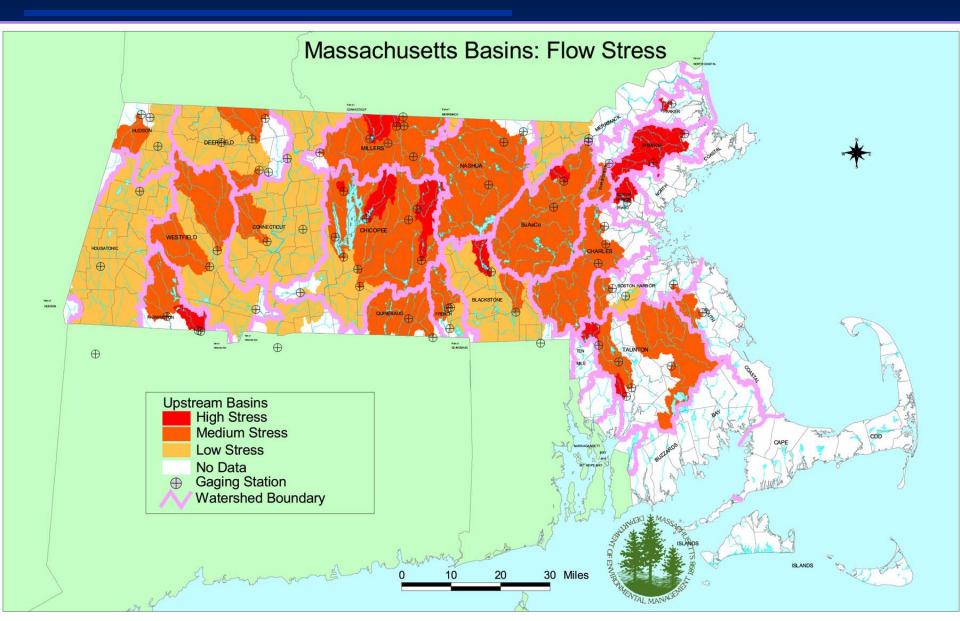


#### New Development 1985 - 1999



1990-2000: 333,000+ new residents

### **Stressed Basins**



### **Environmental Impacts of Low Flow**

#### Water quality

- pollutant concentrations
- temperature
- dissolved oxygen

#### Physical

- fish passage
- wetlands
- aesthetics
- recreation



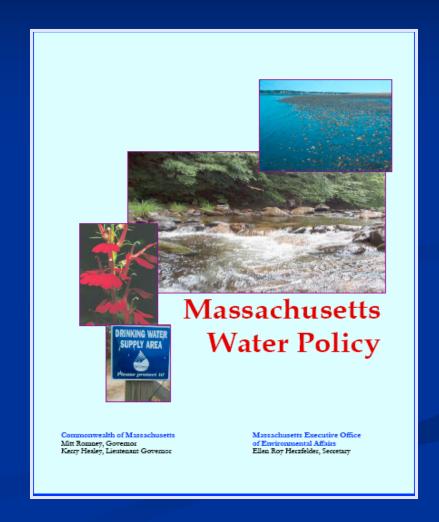
### **Economic Impacts of Low Flow**

- Water shortages and bans
- Building moratoriums



### MA Water Policy - 2004

- Multi-stakeholder input
- Addresses all aspects of water use
- Emphasis on water quantity
- All EOEA agencies engaged in implementation
  - (OTA technical assistance in industrial water conservation and wastewater treatment and reuse)



## Stressed Basins: Definition and Remediation

Index streamflows

Refine stress definition

- Performance standards and mitigation
  - Pricing, technology, water offsets
- Water conservation
  - Updated Water Conservation Standards

# Update Water Conservation Standards

- 1) Comprehensive Planning
- 2) Water Audits and Leak Detection
- 3) Metering
- 4) Pricing
- 5) Residential
- 6) Public Sector
- 7) Industrial, Commercial and Institutional
- 8) Agricultural
- 9) Lawn and Landscape
- 10) Public Education and Outreach

<sup>\*</sup>new sections highlighted in orange

#### **Guidance for Communities**

Water Budgets

- Integrated Water Resources Management Planning guidance
  - DEP finalizing guidance
- Smart Growth Tool Kit
  - LID, planning, zoning, subdivision techniques, bylaws
- Fix-it-first strategies

#### **Promote Wastewater Reuse**

- DEP's wastewater reuse regulations
- Reduce infiltration and inflow
  - 2/3 of flow to Deer I.



### **Promote Stormwater Recharge**

- DEP's StormwaterManagement AdvisoryCommittee
  - focused on recharge
- Introduction of LID principles through MEPA
- Promotion of stormwater utilities
  - i.e. Chicopee



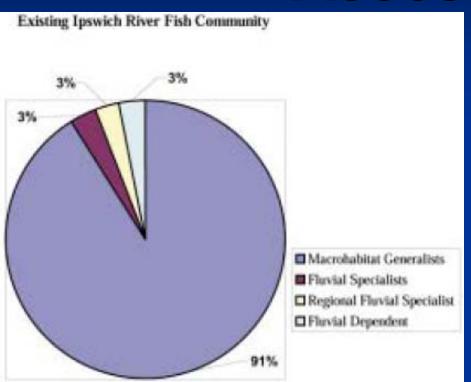
# Effectively Manage Water Supplies

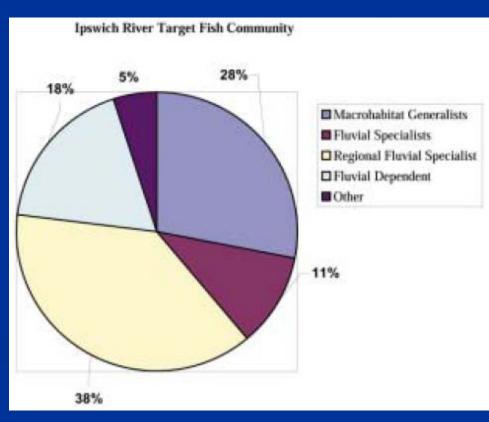
- New Source Approval streamlining
- Drinking Water Supply Protection Grants

- Desalination Policy
  - (Plants proposed in Aquaria, Swansea, Hull)

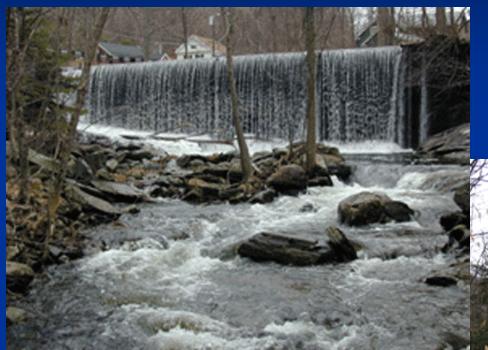


# Conduct Target Fish Assessments





# Improve Fish Passage Dam Removal Permit Streamlining



Prior to removal, April 2000

Silk Mill Dam on Yokum Brook in Becket



After removal, March 2003

# Water Resource Management and Conservation

#### is critical to ensuring....

- Adequate water supply
- Protection of natural resources

#### and requires....

- Effort by state, municipalities, industry, individuals
- **\$\$**
- Innovation
- Perseverance

